AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF THE CLAIMS:

1. (Currently Amended) A force sensor, comprising:

a cylindrically shaped housing, which is elastically deformable by a force acting on it perpendicular to its center axis, and which has a hollow space; and

a measuring transducer device situated in the hollow space, by which a deformation of the housing is recordable;

wherein:

the measuring transducer device includes a plate-shaped support plate and an expansion measurement transducer fastened to a surface of the support plate,

the support plate includes a tapered longitudinal section, ~~tapering in its width in a region in which~~ the expansion measurement transducer [[is]] being situated in the tapered longitudinal section,

the support plate is fastened in the hollow space so that a deformation of the housing is transferred to the support plate, and

the surface of the support plate is aligned parallel to a center axis of the housing, and the center axis runs through edge areas at an end face of the support plate.

2. (Original) The force sensor of claim 1, wherein the support plate includes an edge at which it is connected with at least one of force locking and form locking to an inner wall of the hollow space.

3. (Original) The force sensor of claim 2, wherein the support plate is clamped in the hollow space between opposite sections of the inner wall.

4. (Original) The force sensor of claim 2, wherein an edge section of the support plate is at least one of adhered to, soldered to or welded to the inner wall of the hollow space.

5. (Canceled).

6. (Original) The force sensor of claim 1, wherein the expansion measurement transducer is situated at an angle of 45^0 to a center axis of the cylindrically shaped housing.

7. (Original) The force sensor of claim 1, wherein the expansion measurement transducer is held in a region of a neutral axis with respect to a bending of the housing.

8. (Currently Amended) A force sensor, comprising:

a cylindrically shaped housing, which is elastically deformable by a force acting on it perpendicular to its center axis, and which has a hollow space; and

a measuring transducer device situated in the hollow space, by which a deformation of the housing is recordable;

wherein:

the measuring transducer device includes a plate-shaped support plate and an expansion measurement transducer fastened to a surface of the support plate,

the support plate includes a tapered longitudinal section, ~~tapering in its width in a region in which~~ the expansion measurement transducer [[is]] being situated in the tapered longitudinal section,

the support plate is fastened in the hollow space so that a deformation of the housing is transferred to the support plate, and

an angular position of the support plate in the housing is uniquely specified by a stud on the support plate and by a bulge in the housing that accommodates the stud.

9. (Original) The force sensor of claim 1, wherein the hollow space has a form of one of a blind-end bore and a through-hole bore, starting from a side surface of the cylindrically shaped housing and carried out along a center axis.

10. (Currently Amended) A force sensor, comprising:

a cylindrically shaped housing, which is elastically deformable by a force acting on it perpendicular to its center axis, and which has a hollow space; and

a measuring transducer device situated in the hollow space, by which a deformation of the housing is recordable;

wherein:

the measuring transducer device includes a plate-shaped support plate and an expansion measurement transducer fastened to a surface of the support plate,

the support plate includes a tapered longitudinal section, ~~tapering in its width in a region in which~~ the expansion measurement transducer [[is]] being situated in the tapered longitudinal section,

the support plate is fastened in the hollow space so that a deformation of the housing is transferred to the support plate,

the hollow space has a form of one of a blind-end bore and a through-hole bore, starting from a side surface of the cylindrically shaped housing and carried out along a center axis, and

the measuring transducer device includes a plug for insertion into one of the blind-end bore and the through-hole bore, at which the support plate is joined in the form of a protruding tab.

11. (Original) The force sensor of claim 10, wherein an electronic system for evaluating a signal of the expansion measurement transducer is situated in the plug.

12. (Original) The force sensor of claim 10, wherein a stop with respect to a depth of insertion of the plug and the support plate is formed one of on the plug and by a step in the blind-end bore or the through-hole bore.

13. (Original) The force sensor of claim 9, wherein the support plate includes a rectangularly-shaped plate, and at its longitudinal edges running parallel to the center axis of the housing it is connected to the inner wall of the blind-end bore or to the inner wall of the through-hole bore.

14. (Currently Amended) The force sensor of claim 13, wherein in a region of the tapered longitudinal section ~~tapering~~ there is a gap between the longitudinal edges and the inner wall of the blind-end bore or the inner wall of the through-hole bore.

15. (Original) The force sensor of claim 1, wherein two expansion measurement strips that are wired up according to a half bridge within a shear measurement zone of the support plate are situated at right angles to each other.

16. (Original) The force sensor of claim 1, wherein four expansion measurement strips that are wired up according to a full bridge within a shear measurement zone of the support plate are situated pair-wise at right angles to each other on opposite surfaces of the support plate.

17. (Original) The force sensor of claim 1, wherein in each case two expansion measurement strips are situated at right angles to each other within two shear measurement zones at a distance from each other in a longitudinal direction of the housing, and these four expansion measurement strips are wired up in a full bridge so that shear forces recorded in the two shear measurement zones are added together, provided they are equi-directional.

18. (Currently Amended) A method for making a force sensor, the method comprising:

making a support plate oversized with respect to a hollow space of a cylindrically shaped housing;

fastening the support plate in the hollow space, wherein

the hollow space is elastically widened in a direction perpendicular to the center axis of the housing by an action of an outer force; and

inserting the support plate into the widened hollow space;

providing that, when a tension of the hollow space is released, the support plate is clamped in the hollow space

providing that the cylindrically shaped housing is elastically deformable by a force acting on it perpendicular to its center axis, and has the hollow space;

providing that a measuring transducer device situated in the hollow space, by which a deformation of the housing is recordable, in which the measuring transducer device includes a support plate, which is a plate-shaped support plate, and an expansion measurement transducer fastened to a surface of the support plate, wherein the support plate includes a tapered longitudinal section, ~~tapering in its width in a region in which~~ the expansion measurement transducer [[is]] being situated in the tapered longitudinal section, the support plate being fastened in the hollow space so that a deformation of the housing is transferred to the support plate; and

providing that the surface of the support plate is aligned parallel to a center axis of the housing, and the center axis runs through edge areas at an end face of the support plate.

19. (Original) The method of claim 18, wherein the action of a force for the elastic deformation in the manufacturing process is directed perpendicularly to a surface of the support plate.

20. (Previously Presented) The method of claim 18, wherein an angular position of the support plate in the housing is uniquely specified by a stud on the support plate and by a bulge in the housing that accommodates the stud.

21. (Previously Presented) The method of claim 18, wherein the hollow space has a form of one of a blind-end bore and a through-hole bore, starting from a side surface of the cylindrically shaped housing and carried out along a center axis, and wherein the measuring transducer device includes a plug for insertion into one of the blind-end bore and the through-hole bore, at which the support plate is joined in the form of a protruding tab.

22. (Previously Presented) The method of claim 21, wherein an electronic system for evaluating a signal of the expansion measurement transducer is situated in the plug.

23. (Previously Presented) The method of claim 21, wherein a stop with respect to a depth of insertion of the plug and the support plate is formed one of on the plug and by a step in the blind-end bore or the through-hole bore.

24. (Previously Presented) The force sensor of claim 1, wherein the support plate includes an edge at which it is connected with at least one of force locking and form locking to an inner wall of the hollow space, wherein the support plate is clamped in the hollow space between opposite sections of the inner wall, wherein the expansion measurement transducer is situated at an angle of 45^0 to a center axis of the cylindrically shaped housing, wherein the hollow space has a form of one of a blind-end bore and a through-hole bore, starting from a side surface of the cylindrically shaped housing and carried out along a center axis.

25. (Previously Presented) The force sensor of claim 24, wherein the support plate includes a rectangularly-shaped plate, and at its longitudinal edges running parallel to the center axis of the housing it is connected to the inner wall of the blind-end bore or to the inner wall of the through-hole bore, and wherein in a region of the tapering there is a gap between the longitudinal edges and the inner wall of the blind-end bore or the inner wall of the through-hole bore.

26. (Previously Presented) The force sensor of claim 24, wherein two expansion measurement strips that are wired up according to a half bridge within a shear measurement zone of the support plate are situated at right angles to each other.

27. (Previously Presented) The force sensor of claim 24, wherein four expansion measurement strips that are wired up according to a full bridge within a shear measurement zone of the support plate are situated pair-wise at right angles to each other on opposite surfaces of the support plate.

28. (Previously Presented) The force sensor of claim 24, wherein in each case two expansion measurement strips are situated at right angles to each other within two shear measurement zones at a distance from each other in a longitudinal direction of the housing, and these four expansion measurement strips are wired up in a full bridge so that shear forces recorded in the two shear measurement zones are added together, provided they are equi-directional.

29. (Previously Presented) The force sensor of claim 1, wherein the support plate includes an edge at which it is connected with at least one of force locking and form locking to an inner wall of the hollow space, wherein an edge section of the support plate is at least one of adhered to, soldered to or welded to the inner wall of the hollow space, wherein the expansion measurement transducer is held in a region of a neutral axis with respect to a bending of the housing, wherein the hollow space has a form of one of a blind-end bore and a through-hole bore, starting from a side surface of the cylindrically shaped housing and carried out along a center axis.

30. (Previously Presented) The force sensor of claim 29, wherein the support plate includes a rectangularly-shaped plate, and at its longitudinal edges running parallel to the center axis of

the housing it is connected to the inner wall of the blind-end bore or to the inner wall of the through-hole bore, and wherein in a region of the tapering there is a gap between the longitudinal edges and the inner wall of the blind-end bore or the inner wall of the through-hole bore.

31. (Previously Presented) The force sensor of claim 29, wherein two expansion measurement strips that are wired up according to a half bridge within a shear measurement zone of the support plate are situated at right angles to each other.

32. (Previously Presented) The force sensor of claim 29, wherein four expansion measurement strips that are wired up according to a full bridge within a shear measurement zone of the support plate are situated pair-wise at right angles to each other on opposite surfaces of the support plate.

33. (Previously Presented) The force sensor of claim 29, wherein in each case two expansion measurement strips are situated at right angles to each other within two shear measurement zones at a distance from each other in a longitudinal direction of the housing, and these four expansion measurement strips are wired up in a full bridge so that shear forces recorded in the two shear measurement zones are added together, provided they are equi-directional.